

CLAIMS

1. A method for cleaning a wafer with a drip nozzle for use in a drip manifold that is oriented over a brush of a wafer cleaning system, the drip nozzle having a first end and a second end with a passage defined there between where the passage 5 includes a wall that extends longitudinally between the first end and the second end with an orifice being defined within the passage and located at the first end of the drip nozzle, the method comprising:

inputting a fluid into the drip nozzle at an acute angle relative to a longitudinal extension of the wall;

10 reflecting the fluid stream off an internal wall of the drip nozzle at least twice in a direction that is toward the second end; and

outputting at least one substantially uniform drop from the second end of the passage.

15 2. A method for cleaning a wafer as recited in claim 1, further comprising:

applying the at least one substantially uniform drop onto a brush.

20 3. A method for cleaning a wafer as recited in claim 1, wherein the drip manifold is integrated into a cleaning station and the drip manifold extends over a length of the brush.

4. A method for cleaning a wafer as recited in claim 1, wherein inputting a fluid into the drip nozzle includes introducing the fluid into the first end.

5. A method for cleaning a wafer as recited in claim 1, wherein the acute angle is between about 15 degrees and about 75.

6. A method for cleaning a wafer as recited in claim 1, wherein the acute angle is about 45 degrees.

10 7. A method for cleaning a wafer as recited in claim 1, wherein the acute angle is about 45 degrees.

8. A method for cleaning a wafer as recited in claim 2, further comprising:
scrubbing a wafer with the brush.

15 9. A method for cleaning a wafer with a drip manifold including at least one drip nozzle comprising:

inputting a fluid into a first end of the at least one drip nozzle at an acute angle relative to a wall that extends longitudinally between the first end and a second end
20 of the at least drip nozzle;

reflecting the fluid stream off an internal wall of the at least one drip nozzle at least twice in a direction that is toward the second end of the at least one drip nozzle; and

- outputting at least one substantially uniform drop from the second end of
5 the passage at a consistent rate; and
applying the at least one substantially uniform drop onto a brush.

10. A method for cleaning a wafer as recited in claim 9, wherein the drip manifold is integrated into a cleaning station and the drip manifold extends over a length
10 of the brush.

11. A method for cleaning a wafer as recited in claim 9, wherein inputting a fluid into the drip nozzle includes introducing the fluid into the first end.

15 12. A method for cleaning a wafer as recited in claim 9, wherein the acute angle is between about 15 degrees and about 75.

13. A method for cleaning a wafer as recited in claim 9, wherein the acute angle is about 45 degrees.

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14. A method for cleaning a wafer as recited in claim 9, wherein the acute angle is about 45 degrees.

15. A method for cleaning a wafer as recited in claim 9, further comprising:
5 scrubbing a wafer with the brush.

16. A method for cleaning a wafer with a drip manifold including at least one drip nozzle comprising:

inputting a fluid into a first end of the drip nozzle at an acute angle relative
10 to a wall that extends longitudinally between the first end and a second end of the drip nozzle;

reflecting the fluid stream off an internal wall of the drip nozzle at least twice in a direction that is toward the second end of the drip nozzle; and

outputting at least one substantially uniform drop from the second end of
15 the passage at a consistent rate;

applying the at least one substantially uniform drop onto a brush; and
scrubbing a wafer with the brush.

17. A method for cleaning a wafer as recited in claim 16, wherein the drip
20 manifold is integrated into a cleaning station and the drip manifold extends over a length of the brush.

18. A method for cleaning a wafer as recited in claim 16, wherein inputting a fluid into the drip nozzle includes introducing the fluid into the first end.

19. A method for cleaning a wafer as recited in claim 16, wherein the acute
5 angle is between about 15 degrees and about 75.

20. A method for cleaning a wafer as recited in claim 16, wherein the acute angle is about 45 degrees.

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